

# COMBINED OPTICAL STORAGE AND FLASH CARD READER USING SINGLE IDE OR SATA PORT AND METHOD THEREOF

## Abstract

An electronic system includes a host; a controller electrically coupled to the host through a single port of a predetermined bus, the single port for providing the host access to N devices; and M peripheral devices electrically coupled to the controller, M being greater than N. By modifying control codes, reserved vendor-specific bits in packets or registers in an IDE task file that are sent between the host and the controller, the host is able to specify a target peripheral device and to determine which peripheral device sent each packet that is received by the host. In this way, the host can access the peripheral devices using the single port. When the peripheral devices include a first peripheral device and a second peripheral device, the controller can directly transfer data stored on the first peripheral to the second peripheral device without requiring the data to be buffered in the host.